PREDICT-2 FY19Q2 GHSA Phase I Semi-Annual Report

All Phase I countries will submit progress reports on GHSA implementation on a semi-annual basis. At this time Phase II countries will report annually, using a separate template. The US Embassy in each country is responsible for preparing and submitting the required progress reports to the interagency. To aid USAID Missions in completing their report utilizing implementing partner activities and progress, USAID asks implementing partners to submit semi-annual reports for Phase I countries. Partners will be requested report on specific progress toward raising a country's capacity levels. As previously mentioned, the focus of USAID's GHSA work is to make progress on the AP capacity levels measured by WHO's JEE tool.

The timeline for FY19 is below. Due to ad hoc reporting and effective project monitoring, USAID may need to adjust the reporting schedule, but will do its best to give advance notice. Reports are due to the USAID GHSA Washington team and the project AOR.

Report	Due Date
FY19Q2 Mid-year Progress Report	April 15, 2019
FY19Q4 End of the Year Progress Report	September 16, 2019

Notes:

- -The FY19 Q2 reporting timeline is from October 1, 2018-March 31, 2019
- -The FY19 Q4 reporting timeline is from April 1, 2019-September 30, 2019
- -For more information on action packages, capacity levels and indicators, please use the JEE Tool:

http://apps.who.int/iris/bitstream/10665/204368/1/9789241510172_eng.pdf

- -Please see the attached document titled "Additional Information on the Joint External Evaluation Level of Capacity Score Descriptions," which provides supplementary information on many of the capacity levels.
- -Send relevant pictures with captions/photo credit to enhance reporting
- -Please fill all sections of the template for relevant countries, including Sections 2-4 after the chart.

Africa

Asia

	Country			
1.	Burkina Faso			
2.	Cameroon			
3.	Cote d'Ivoire			
4.	Ethiopia			
5.	Guinea			
6.	Kenya			
7.	<u>Liberia</u>			
8.	<u>Mali</u>			
9.	Senegal			
10.	. Sierra Leone			
11.	11. Tanzania			
12.	12. Uganda			

Country			
1.	Bangladesh		
2.	<u>India</u>		
3.	Indonesia		
4.	Vietnam		

Senegal
<u>Section 1: Summary of Health Security Capacities and Changes in Capacity</u>

1	2	3	4
USAID's GHSA Technical Focus Areas	GHSA Indicator	Specific progress made toward capacity level	Comments
Antimicrobial Resistance (AMR)	P.3.1 Antimicrobial resistance detection		
	P.3.2 Surveillance of infections caused by AMR pathogens		
	P.3.3 Healthcare associate infection (HCAI) prevention and control programs		
	P.3.4 Antimicrobial stewardship activities		
Zoonotic Disease	P.4.1: Surveillance systems in place for priority zoonotic diseases/pathogens	PREDICT/Senegal completed surveillance activities in the Sindia region for priority zoonotic diseases and other emerging threats. All samples were safely stored at partner laboratories prior to testing. Laboratory testing of human and animal samples has been a priority activity for the last six months (October 2018 – March 2019). PREDICT/Senegal continues to engage partners from the Ministry of Health, Agriculture and the Environment in training activities providing field-based opportunities to increase technical skills and capacity. PREDICT/Senegal has focused efforts towards data analysis and stakeholder/community engagement (development of risk communication and outreach strategies) to ensure project findings and inform local and national One Health surveillance plans for	PREDICT's zoonotic disease surveillance is strategically designed to train, equip, and enable surveillance personnel to collect data and build the evidence base for both priority zoonoses (such as zoonotic influenza and viral hemorrhagic fevers) and emerging and re-emerging pathogens, such as MERS-CoV in vulnerable and high-risk areas. PREDICT engages local Ministry partners to build capacity in One Health surveillance strategies. Shared animal and human surveillance data and findings help catalyze formal information sharing between animal and human surveillance systems. In addition, our surveillance engages local communities in high-risk areas for disease transmission and emergence and fosters improved recognition of zoonotic diseases and awareness of transmission pathways and prevention and control options. PREDICT will continue to provide critical in-service training opportunities identified as a challenge in the JEE through a deliberately designed One Health

	priority diseases in close coordination with district level, veterinary, environmental and public health professionals. Moreover, PREDICT/Senegal is actively engaging and communicating about risk with populations in Sindia and neighboring regions about zoonotic diseases, and living safely with bats and other wildlife.	zoonotic disease surveillance program that encourages hands-on development of core skills lacking in the current animal health workforce.
P.4.2: Veterinary or Animal Health Workforce	PREDICT/Senegal partner, the Ecole Inter-États des Sciences et Médecine Vétérinaires (EISMV) continues to collaborate with the Direction des Parks Nationaux (DPN) to build capacity of DPN staff on One Health surveillance skills. Twenty six animal health specialists from the Ministry of the Environment (DPN and Water and Forest) were engaged in field trainings that include biosafety and biosecurity, PPE and safe wildlife sampling techniques increasing capacity of the national animal health workforce.	PREDICT provides critical in-service training opportunities identified as a challenge in the JEE through a deliberately designed One Health zoonotic disease surveillance program that encourages handson development of core skills lacking in the current animal health workforce. We offer trainings to animal health professionals (district-level veterinary officers, environment staff, lab technicians in animal health labs, and local community members), directly strengthening the capability of the current workforce to successfully and safely conduct core functions of their job on the frontlines of zoonotic disease control.
	In addition, PREDICT/Senegal has worked with the Senegal Emergency Operations Center (COUS) and implemented table-top exercises to improve Senegal's capacity to implement One Health outbreak responses to emerging diseases.	
P.4.3: Mechanisms for responding to infectious zoonosis and potential zoonosis	PREDICT/Senegal continues to actively work to support the National One Health Platform in Senegal and contribute to the development of the One Health Strategic Plan, areas identified as a challenge in the JEE. PREDICT team members participated in ongoing meetings with One Health Taskforce Partners: (the Prime Minister's Office, the Health Emergency Operations Center (COUS), FAO, WHO, and	Through our implementing partners EISMV, ISRA, and UCAD, our One Health network in Senegal engages all ministries and government partners, such as the Ministry of Agriculture, Ministry of Livestock, Ministry of Environment, Ministry of Health. Our team actively participates in the National GHSA Task Force, the National One Health Platform, as well as the COUS, and serves as a resource for the development and operationalization of Senegal's One

		CDC), as well as the Ministry of Health, Agriculture and the Environment. These meetings provided opportunities to present ongoing activities in Senegal, encouraged coordination between various One Health groups (human and animal), and offered our team the opportunity to provide guidance on increasing the capacity for surveillance and response for priority zoonoses and emerging threats. The PREDICT/Senegal team was requested by the Government of Senegal to organize a simulation exercise on the "Detection and Response to a Filovirus Outbreak in Sindia". This 2-day simulation, held in Dakar January 2019, was presented by PREDICT/SENEGAL in collaboration with the COUS and other GHSA partners. Senegal Prime Ministry advisors, the General Director of the Ministry of Health and various international health partners attended this event. In addition, PREDICT/Senegal is utilizing the "living safely with bats" book developed by the PREDICT Global team to engage with communities in the Sindia region (PREDICT surveillance site). Risk communication and zoonotic disease awareness sessions occur with the help of community leaders and local stakeholders.	Health Strategic Plan. We also maintain active linkages to One Health Workforce. PREDICT also helps facilitate communication between the different local stakeholders in order to share information on emerging threats more efficiently. Finally, through the joint laboratory efforts of UCAD and ISRA, PREDICT/Senegal improves knowledge and information on priority and emerging threats and communicate these findings to state and national authorities and the global community with recommendations for prevention and control across both the animal and human health sectors. PREDICT/Senegal is seen as a reference for technical expertise on disease surveillance utilizing a One Health approach. The Government of Senegal regularly reaches out to the PREDICT/Senegal team for technical expertise related to One Health disease detection and response in both the human and animal sectors (as seen with the request by the COUS to present an outbreak simulation event).
Biosafety and Biosecurity	P.6.2: BSS training and practices (focused on animal health)	PREDICT/Senegal continues to organize refresher trainings for members of the human and wildlife teams focused on aspects of safe sampling, PPE, data entry, human and animal welfare and biosecurity/biosafety. PREDICT/Senegal organized a 5-day workshop on PREDICT Viral Detection Protocols and Laboratory Biosafety hosted at Dantec hospital in January 2019. The multidisciplinary cohort of participants included the Government of Senegal, One Health Workforce, biologists and doctors from	PREDICT/Senegal partners are training institutions that actively promote and engage students and career professionals in continuing education and we provide ongoing hands-on opportunities for students, interns, and staff to build technical skills and knowledge in field and lab settings. Despite field surveillance activities being completed, the PREDICT team continues to engage animal, wildlife/ecosystem, and human health professionals in field and laboratory trainings, providing opportunities to strengthen skills across the full spectrum of surveillance, detection, and response.

		the national health system, and students in animal and human medicine.	
Immunization	P.7.1 Vaccine coverage (measles) as part of national program		
	P.7.2 National vaccine access and delivery		
Laboratory Systems Strengthening	D.1.1: Laboratory testing for detection of priority diseases (focused on animal health)	PREDICT/Senegal engaged with partner labs at UCAD and ISRA to strengthen capacity for detection and discovery of zoonotic viruses with epidemic and pandemic potential. Both labs performed testing for zoonoses across five viral families (filovirus, flavivirus, influenza, paramyxovirus and coronavirus), which constitute a threat for Senegal and other West African countries. The advanced detection capability in the ISRA lab (part of the national lab system) and at UCAD (a major training center) are addressing concerns highlighted in the JEE. Along these lines, PREDICT/Senegal organized a 5-day workshop on PREDICT Viral Detection Protocols and Laboratory Biosafety which included sessions on detection viruses with epidemic and endemic potential, January 2019 at Dantec hospital. Participants included Ministry of Health and students in human and animal medicine. Testing of human and animal samples is ongoing and findings will help strengthening biosecurity and national surveillance and laboratory systems, while improving the stability of these systems through One Health workforce development.	PREDICT partner labs at ISRA and UCAD have been trained and equipped in the full range of activities required for safely detecting zoonotic viruses, including biosafety and biosecurity, cold chain, safe sample storage, data management, safe sample transport and shipping, and molecular viral detection techniques. Both labs have capacity to safely detect priority zoonotic diseases (Rift Valley Fever, zoonotic influenza viruses, and viral hemorrhagic fevers such as Ebola) and other emerging viral threats. Both labs plan to also serve as key training centers for students and professionals, including government staff from the national lab system. PREDICT reinforced both UCAD and ISRA with new equipment that strengthens disease detection capacity for Senegal. Both labs maintain strong ties to the national system and protocols and information will be shared openly with other animal and human health labs within the national system to strengthen detection and surveillance capabilities across both sectors.

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	P.1.2: Specimen referral and transport system (focused on animal health)		
	D.1.4: Laboratory Quality System (focused on animal health)		
Real Time Surveillance	D.2.1 Indicator and event based surveillance systems		
	D.2.2 Interoperable, interconnected, electronic real- time reporting system D.2.3 Analysis of surveillance data		
	D.2.4 Syndromic surveillance systems		
Reporting	D.3.1 System for efficient reporting to WHO, FAO and OIE D.3.2 Reporting network and		
	protocols in country		
Workforce Development	D.4.1: Human resources are available to implement IHR core capacity requirements	PREDICT/Senegal team, all based at local government or university institutions, continue to conduct trainings to advance national zoonotic disease workforce capabilities. All project staff, future one health workforce partners, as well as local partners in the Ministry of Health, Agriculture and Environment, were trained in core skills required for safe and effective zoonotic disease surveillance and disease detection. Trained individuals have also undergone refresher trainings for those courses requiring annual certification. Through participation in surveillance and community engagement activities, doctors, nurses and community health workers from the district of Popenguine (which includes the	The lead implementing partner for PREDICT wildlife sampling in Senegal is EISMV, the primary training ground for animal health professionals in-country. PREDICT is embedded within EISMV, ISRA, and UCAD, and the project provides ongoing opportunities for students, interns, and staff to engage in project activities. In addition, community engagement and training activities engage and involve animal and human health professionals, providing opportunities to strengthen skills in zoonotic disease surveillance and detection with hands-on learning for safe capture and sampling of wildlife, cold chain, safe sample transport, and viral detection at collaborating labs.

		Sindia field site) have strengthened their capacity in the surveillance and detection of viral pathogens. Moreover, PREDICT/Senegal reinforced communications and strengthened collaborations between the human and animal health workforce sectors in the region.	
Preparedness	R.1.1 Multi-hazard national public health emergency preparedness and response plan is developed and implemented R.1.2 Priority public health risks and resources are mapped and utilized		
Medical Countermeasures and Personnel Deployment	R.4.1 System is in place for sending and receiving medical countermeasures during a public health emergency R.4.2 System is in place for sending and receiving health personnel during a public health emergency		
Risk Communication	R.5.1 Risk communication systems (plans, mechanisms, etc) R.5.2 Internal and partner communication and coordination R.5.3 Public communication		
Other relevant Action	R.5.4 Communication engagement with affected communities R.5.5 Dynamic listening and rumor management		
Other relevant Action Package (fill in)	(fill in appropriate indicator)		

Section 2: Major success stories/notable achievements

PREDICT/Senegal increases the capacity of the West Africa regional One Health Workforce for pathogen detection of potential epidemic threats.

Regional capacity and rapid communication are essential to effectively control viral transmission of potential pandemic threats. Targeting regional reference training centers and laboratories, PREDICT/Senegal has trained over 100 individuals from the West African region, increasing the capacity of the current and future One Health Workforce

Throughout implementation of the PREDICT project, PREDICT/Senegal partner laboratories have strengthened their capacity for detection and discovery of zoonotic viruses with epidemic and pandemic potential. Both PREDICT laboratories at UCAD and ISRA/LNERV serve as training resources for Senegal and neighboring countries in the West African region. ISRA/LNERV, the reference laboratory of WAHO (West African Health Organization), and UCAD have made an institutional commitment to support and sustain One Health technical capacity within the West African regional integrated monitoring system. Along these lines, PREDICT/Senegal organized two events that support continued capacity building.

The first event was a workshop on PREDICT Viral Detection Protocols and Laboratory Biosafety, January 21-25 at Dantek Hospital. 20 participants attended the 5-day workshop and included individuals from the Ministry of Health, GHSA partners, and University students in human and animal medicine. Training targeted building skills in biosafety, sample collection, sample storage and transport, cold chain and viral detection using molecular techniques.

The second event was organized upon direct request from the Senegal Government's Emergency Operations Center (COUS). PREDICT/Senegal organize a simulation exercise on the "Detection and Response to a Filovirus Outbreak in Sindia". This simulation was held in Dakar, 30-31 January 2019, in collaboration with the COUS. Advisors from the Prime Ministry, the General Director of the Ministry of Health, representatives from the Ministries of Agriculture, Health and the Environment, CDC, WHO and other GHSA partners attended this important event.



Figure 1: PREDICT/Senegal Workshop on Viral Detection and Biosafety



Figure 2: Opening ceremony of Outbreak Simulation Exercise Organized by PREDICT/Senegal (Photo Credit: PREDICT/Senegal)



Figure 3: Outbreak Simulation Exercise, 30-31 January 2019, Radisson Blue Dakar (Photo Credit: PREDICT/Senegal)